72　40mm（掏空）
4R-10

USER MANUAL

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1. Open the box and checking

Congratulations on choosing our products! Please carefully read this instruction m anual in its entirety and keep it well for using reference. This m anual contained about the installation and the relative using information of this products. Please according to this m anual's relative speaking when using this equipm ent.

This equipm ent was made of new style, high intensity plastic . It fully shows the m odem times light characteristic with beauty structure. And it was made according to CE standard. Fully up the international standard of DM X512 agreem ent. M aster or slave in phase control.Can be use in large entertainm ent, theater, performing and playing hall, etc.

This product uses MSR 700SA PHICIPS ectrical arc lam p. W hen receiving this product please carefully bring and put; and check that whether this equipm ent has been dam aged or not during transportation. And please also check the following thing was enclosed:

Signal line ---------- one piece Safety string ----------one piece
User M anual ---------- one set

2. Safety instructions

Every person involved with installation and maintenance of this device have to:
- be qualilfied
- follow the instructions of this manual

CAUTION!
Be careful with your operations.
With a high voltage you can suffer
a dangerous electric shock when touching the wires!

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to en-sure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Important:

- ◆The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.
- ◆Please consider that damages caused by manual modifications to the device are not subject to warranty.
- ◆Never let the power-cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- ◆Make sure that the available voltage is not higher than stated on the rear panel.
- ◆Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect the device to the mains. The power plug has to be accessable after installing the device.
- ◆Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

◆Always disconnect from the mains, when the device is not in use or before cleaning it.
◆Only handle the power-cord by the plug. Never pull out the plug by tugging the power cord.
◆This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
◆The electric connection, repairs and servicing must be carried out by a qualified employee.
◆Do not connect this device to a dimmer pack.
◆Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.
◆During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
◆Do not touch the device's housing bare hands during its operation (housing becomes hot)!
◆For replacement use lamps and fuses of same type and rating only.

CAUTION ! EYEDAMAGES !
Avoid looking directly into the light source
(meant especially for epileptics) !

3. Operating determinations

◆This device is a moving-head for creating decorative effects and was designed for indoor use only.
◆ If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
◆Never run the device without lamp!
◆Do not shake the device. Avoid brute force when installing or operating the device.
◆Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
◆When choosing the installation-spot, please make sure that the device is not exposed to heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!
◆The minimum distance between light output and the illuminated surface must be more than 1.5 meters.
◆Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fix-ture.
◆Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.
◆operate the fixture after having checked that the housing is firmly closed and all screws are tightly fas-tened.
◆The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may explose and emit a high ultraviolet radiation, which may cause burns.

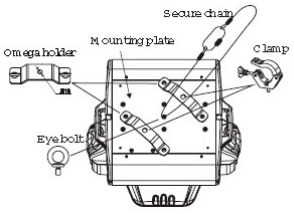
◆The maximum ambient temperature 40°C must never be exceeded.
◆Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
◆Please use the original packaging if the device is to be transported.
◆Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
◆If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash etc.

The lamp used in this projector is a discharge lamp.After switching off don't attempt to restart the projector until la mp has cooled,this will require approx 15 minutes.Switc hing the lamp on and off at short intervals will reduce the life of both the lamp and the projector.But occasional bre aks will prolong the lamp and projector.

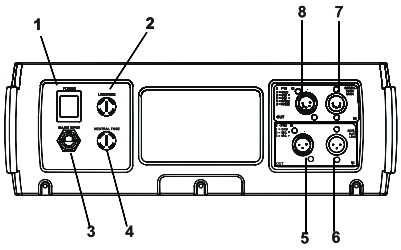
4.Rigging the fixture

DANG ER TO LIFE Please consider the respective national norm s during the Installation! The installation must only be carried out by an authorized dealer!
Ø The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
Ø The installation must always be secured with a secondary safety attachment, e.g. An appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall n if the main attachment fails.
ØW hen rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.
Ø The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

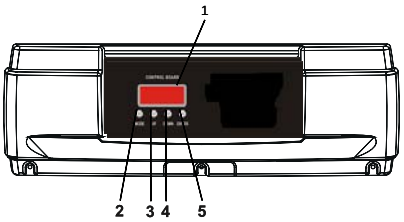
Ø The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.
Ø The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.
Ø The projector should be installed outside areas where persons m ay walk by or be seated.
Ø IM PO R TA N T! OVERHEAD RIGGING REQUIRES EX TEN SIV E EX PERIEN CE, including (but not limited to)calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.
Ø The projector has to be installed out of the reach of people.
Ø If the projector shall be lowered from the ceiling or high joists, professional trussing system s have to be used. The projector must never be fixed swinging freely in the room .
Ø Caution Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do NOT install the projector!
Ø Before rigging make sure that the installation area can hold a minim um point load of 10 times the projector s weight.
Ø The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.
Ø For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw –on carabines. Pull the safety-rope through the two apertures on the bottom of the base and over the trussing system etc.
Insert the end in the carabine and tighten the fixation screw .



5.Description of the device

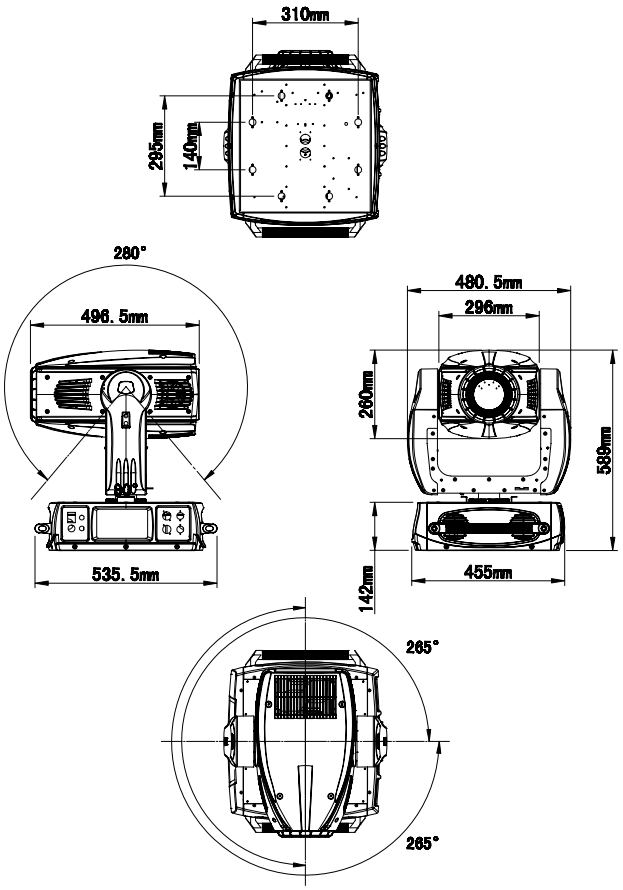


1. power switch
2. Insurance seat
3. power-in
4. Insurance seat
5. 3-pin XLR female
6. 3-pin XLR male
7. 5-pin XLR male
8. 5-pin XLR female



1.LED
2.MODE
3.UP
4.DOWN
5.ENTER

6. Dimension

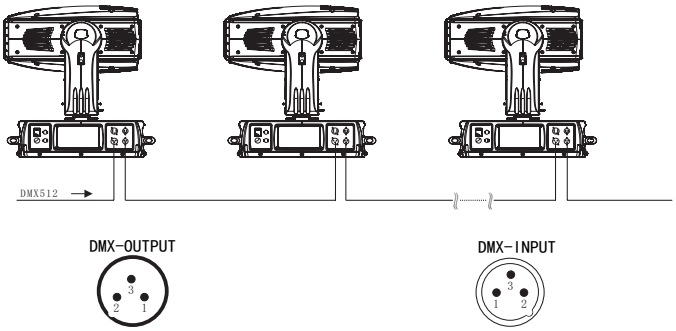

310mm
295mm
140mm
280°
496.5mm
535.5mm
480.5mm
296mm
280mm
589mm
142mm
455mm
265°
265°

7.DMX-512 connection

If you wish to change the power supply settings, see the chapter Appendix.
Connect the fixture to the mains with the enclosed power cable and plug.
The earth has to be connected!

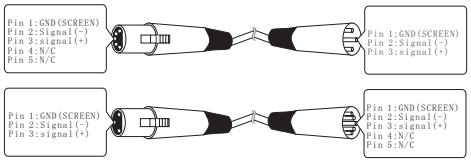
Cable(UE)	Cable(US)-208V	Pin	International
Brown	Black	Live	L
Liht blue	white	Neutral	N
Yellow/Green	Green	Earth	⏚

DM X-512 connection/connection between fixtures
Only use a stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.



Caution:

At the last fixture, the DM X-cable has to be terminated with a terminator. Solder a 120 resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.



8.DMX protocol

Channel 1 - PAN movement 8bit :	
Channel 2 – Pan fine	
Channel 3 - TILT movement 8bit :	
—	
Channel 4– Tilt fine	
—	
Channel 5 - Speed pan/tilt movement	
0-225	max to min speed
226-235	blackout by movement
236-245	blackout by all wheel changing
246-255	no function
Channel 6 - Color Wheel 1:	
0-8	Open / white
9-17	Color 1
18-26	Color 2
27-35	Color 3
36-44	Color 4
45-53	Color 5
54-62	Color 6
63-71	Color 7
72-80	Color 8
81-89	Color 9
90-98	Color 10
99-107	Color 11
108-116	Color 12
117-127	Color 13
128-187	Forwards rainbow effect from fast to slow
188-193	No rotation
194-255	Backwards rainbow effect from slow to fast
Channel 7 - Color Wheel 2:	
0-8	Open / white
9-17	Color 1
18-26	Color 2
27-35	Color 3
36-44	Color 4
45-53	Color 5
54-62	Color 6
63-71	Color 7

72-80	Color 8
81-89	Color 9
90-98	Color 10
99-107	Color 11
108-116	Color 12
117-127	Color 13
128-187	Forwards rainbow effect from fast to slow
188-193	No rotation
194-255	Backwards rainbow effect from slow to fast
Channel 8 - Rotating gobos, cont. rotation :	
0-9	Open
10-19	Rot. gobo 1
20-29	Rot. gobo 2
30-39	Rot. gobo 3
40-49	Rot. gobo 4
50-59	Rot. gobo 5
60-69	Rot. gobo 6
70-79	Rot. gobo 7
80-99	Gobo 1 shake slow to fast
100-119	Gobo 2 shake slow to fast
120-139	Gobo 3 shake slow to fast
140-159	Gobo 4 shake slow to fast
160-179	Gobo 5 shake slow to fast
180-199	Gobo 6 shake slow to fast
200-219	Gobo 7 shake slow to fast
220-255	Rot. gobo wheel cont. rotation slow to fast
Channel 9 - Rotating gobo index, rotating gobo rotation :	
0-127	Gobo indexing
128-187	Forwards gobo rotation from fast to slow
188-193	No rotation
194-255	Backwards gobo rotation from slow to fast
Channel 10 - Gobos :	
0-9	Open
10-19	Gobo 1
20-29	Gobo 2
30-39	Gobo 3
40-49	Gobo 4
50-59	Gobo 5
60-69	Gobo 6

70-79	Gobo 7
80-89	Gobo 8
90-99	Gobo 9
100-109	Gobo 1 shake slow to fast
110-119	Gobo 2 shake slow to fast
120-129	Gobo 3 shake slow to fast
130-139	Gobo 4 shake slow to fast
140-149	Gobo 5 shake slow to fast
150-159	Gobo 6 shake slow to fast
160-169	Gobo 7 shake slow to fast
170-179	Gobo 8 shake slow to fast
180-189	Gobo 9 shake slow to fast
190-255	Rot. gobo wheel cont. rotation slow to fast
Channel 11- 3 facet rotating prism, Prism / Gobo macros:	
0-3	closed
4-127	Forwards rotation from fast to slow
128-135	No rotation
136-255	Backwards rotation from slow to fast
Channel 12- Effect Scene :	
0-15	No Function
16-31	Macro 1
32-47	Macro 2
48-63	Macro 3
64-79	Macro 4
80-95	Macro 5
96-112	Macro 6
112-127	Macro 7
128-143	Macro 8
144-159	Macro 9
160-175	Macro 10
176-191	Macro 11
192-207	Macro 12
208-223	Macro 13
224-239	Macro 14
240-255	Macro 15
Channel 13 –Frost	
0-191	Frost 0~100%
192-223	Pulse opening fast to slow
224-254	Pulse closing slow to fast

255	Max. Frost
Channel 14 – Iris:	
0-191	Max. diameter to Min.diameter
192-223	Pulse opening fast to slow
224-255	Pulse closing slow to fast
Channel 15 – Zoom	
0-255	Zoom adjustment from big to small
Channel 16 – Focus:	
0-255	Continuous adjustment from near to far
Channel 17 - Shutter, strobe:	
0-31	Shutter closed
32-63	No function (shutter open)
64-95	Strobe effect slow to fast
96-127	No function (shutter open)
128-159	Pulse-effect in sequences
160-191	No function (shutter open)
192-223	Random strobe effect slow to fast
224-255	No function (shutter open)
Channel 18- Dimmer (intensity):	
0-2	Shutter closed
3-255	Intensity 0 to 100%
Channel 19– Internal Programs:	
0-19	colour change normal
20-39	colour change to any position
40-51	No Function
52-77	Internal program 1
78-103	Internal program 2
104-129	Internal program 3
130-155	Internal program 4
156-181	Internal program 5
182-207	Internal program 6
208-233	Internal program 7
234-255	Internal program 8
Channel 20– Lamp on/off, Reset:	
0-39	No Function

40-59	Lamp switch off
60-79	No function
80-84	All motor reset
85-87	Scan motor reset
88-90	Colors motor reset
91-93	Gobo motor reset
94-96	Shutter & Dimmer motor reset
97-99	Other motor reset
100-239	No function
240-255	Lamp on

9.Control menu map

0	ADDR	A001---Axxx		
1	TEST	T-01~T-XX		
2	SET	RUN	MSTR/ALON	
		AUDI	MSTR/ALON	
		STAT	Clos/Hold//Auto/Audi	
3	LAMP	ON/ OFF		
4	REST	ALL		
		SCAN		
		COLR		
		GOBO		
		SHTR		
		OHTR		
5	TIME	FIXT	0000~9999	
		LAMT	0000~9999(hours)	
		CLET		
6	RPAN	ON/OFF		
7	RTLT	ON/OFF		
8	MIC	M-XX		
9	POHT	P ON	ON/OFF	
		P OT	P-XX(50-999)	
10	DISP	VALU	D–XX D-00 (DXXX)	
		D ON	ON/OFF	
		REVE	ON/OFF	
11	CONT	LAAU	ON/OFF	
		RDMX	ON/OFF(10.10/11.XXX)	
		DLOF	ON/OFF	
		DLAY	D–XX D-05	
		FOCU	ON/OFF	
		INIT	ON/OFF	
		FEED	ON/OFF	
		VER	V1.0~V9.9	
		ADJU	CODE	CXXX
			CH01~CH30	XXXX(-128~127)

10.Operation

turn on the light, reset, LED display show the website, model, software version , after reset display show the below information

display	status
“Axxx”	light is normal, but no DMX ,"XXX" show the value between 1-512
“A.xxx”	light and DMX is normal ,"XXX" show the value between 1-512
“Dxxx”	Light is normal ,no DMX ,"XXX" show the value between 1-512
D.xxx	Light is normal, under control of DMX controller ,"XXX" show the value between 1-512. To check whether the connection between light and controller is OK
A.U-M	Light is normal, autorun, can't controlled by controller
A.U-A	light is normal, autorun
S.O-M	Light is normal, music control
S.O-A	light is normal, single light music control
“Erxx”	Channel mistake, "XX" show the failed channel,"Er01,Er03,Er06,Er07,Er08,Er09,Er10,Er11,Er14,Er15,Er16," reset twice to confirm the light is normal, but the fail channel is still out of controlled

11 . Electric equipment specification

Input voltage:220v 50-60Hz
Power consumption:850W__

Approved model:MSR 700SA PHILIPS

Lamp Base:DX-124A HID GY9.5

GOBO Rotation wheel
Gobo rotation wheel consisted of 7Gobos+open located by magenatic-sensing. More accurate locating.

Fix gobo wheel
Fix gobo wheel composed of 9gobos+open located by magenatic-sensing.More accurate locating

Color wheel
Two same color wheel located by magenatic-sensing.each color wheel composed by 7color+open.

prism
Triple prism rotation

Iris:electronic

Frost
Independent,variable

zoom
Motorized linearity

Strobe
variable stobe effect(0—10tiems/seconds)

Dimmer
Dimmer(0-100%)

Pan/Tilt
Pan540
Tilt270

12.Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not buildup on or within the fixture. Otherwise, the fixtures light-output will be significantly reduced. Regular cleaning will not only ensure the maxim um light-output, but will also allow the fixture to function reliably throughout its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circum stances should alcohol or solvents be used!

DANG ER : Disconnect from the mains before starting any maintenance work

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The gobos m ay be cleaned with a soft brush. The interior of the fixture should be cleaned at least annually usinga vacuum -cleaner or an air-jet.

The dichroic colour-filters, the gobo-w heel and the internal lenses should be cleaned monthly.

To ensure a proper function of the gobo-w heel , we recom m end lubrication in six month intervals. The quantity of oil must not be excessive in order to avoid that oil runs out when the gobo-w heel rotates.

There are no serviceable parts inside the device except for the lam p and the fuse. Please refer to the instructions under "Fitting/Exchanging the lamp ".Maintenance and service operations are only to be carried out by authorized dealers.

Replacing the fuse
If the lam p burns out, the fine-w ire fuse of the device might fuse, too. Only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead.

HC-293D-024
HC016N/U03V10
HC-DISP-021
DC9-14V
T-SINGLE
3-SINGLE
FUSE
L
N